

# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

Airport:	<b>Fort Lauderdale Int.</b>	Scanner Location:	<b>Baggage Handling Room</b>	Case#:	<b>FLL - 330082</b>
Personnel Performing Radiation Survey:			Date Survey Performed: <b>10/30/2010</b>		
Scanner Serial Number: <b>6295</b>		Entrance Tunnel Serial Number: <b>1022A</b>		Exit Tunnel Serial Number: <b>1014B</b>	
High Reading: <b>32</b>	Average Reading: <b>18.14</b>	Min. Reading: <b>8</b>	High Reading: <b>93</b>	Average Reading: <b>28.10</b>	Min. Reading: <b>11</b>
<b>Good</b>			<b>Good</b>		
Radiation Meter: <b>Type Meter: 451P</b>		Meter Serial Number: <b>68</b>		Calibration Due Date: <b>March 8, 2011</b>	

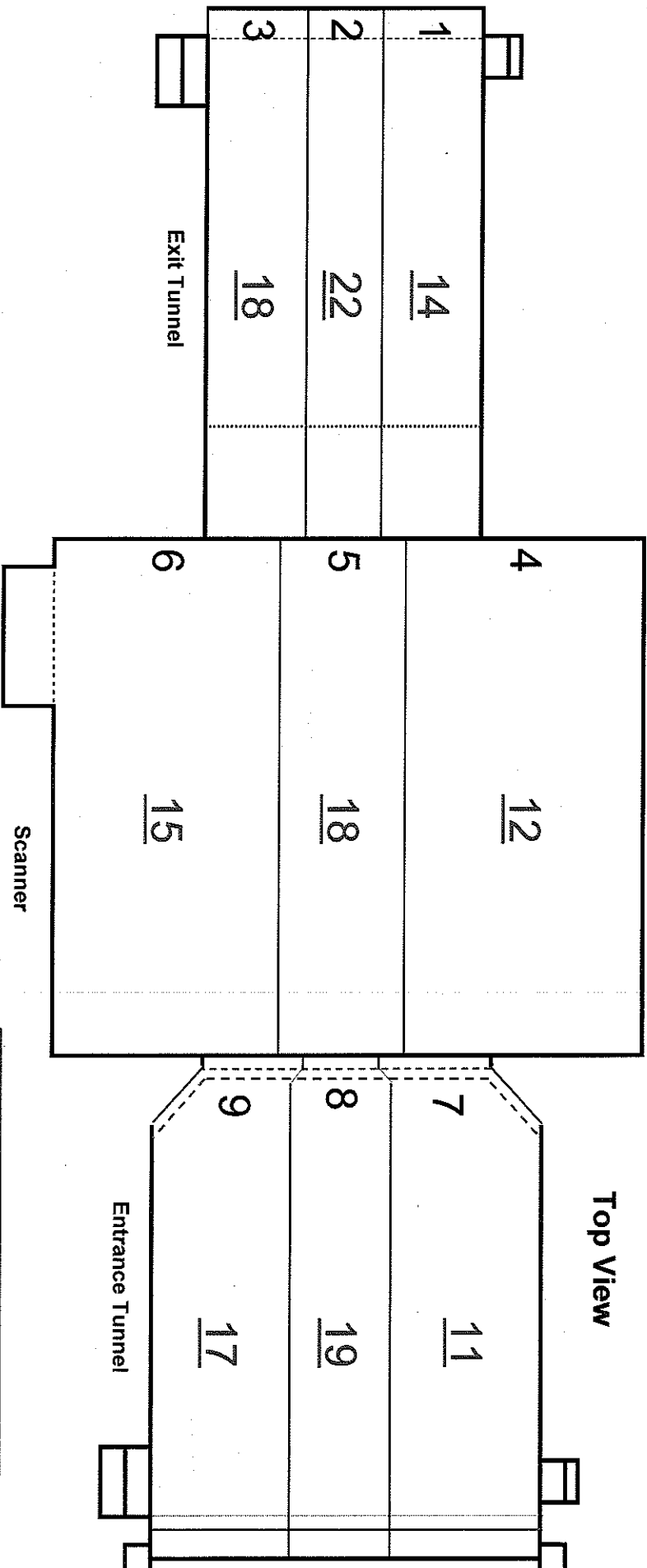
(Click Here and SELECT ONE)

**Rename this Document before starting the Survey to:**

Record Voltage and Beam Current here:					
Voltage:	<b>165</b>	KV	Beam Current:	<b>9.9</b>	mA
Maximum Safe Readings	Scanner	350	Tunnels	350	Curtains
					350

Step	Procedure	Expected results
1.	Set Up: Obtain Invision Ion Chamber Survey Meter and in an area away from the scanners, turn on the meter by pressing the On-Off key. Wait approx. 4 minutes for the meter to run through the initialization procedure.	The GUI will be visible and will indicate Standby. After the radiation meter initialization procedure is complete the meter will be reading less than 20 µR/hr and the meter will be ready for use.
2.	The scanner will be in Standby. Change the conveyor switch on the scanner to Stop. Change the exit tunnel conveyor switch to Off to stop the conveyor.	Both conveyors should be stopped.
3.	On the GUI dropdown screen, select diagnostic, followed by Radiation Survey. A radiation survey window will appear. Click "Turn On" button to turn x-rays on. Turn on x-rays prompt will say "Place survey bag on belt". Place IQTK bag on Entry Conveyor Belt.	A window indicating "Radiation Survey" will appear.
4.	When "Bag in survey position" appears, go to the FCC monitor and select "2" then <Enter>, verify and record the voltage and current in the displayed on the FCC screen in the planks provided above.	The high voltage is between 144KV and 176KV. The current is between 8.8mA and 10.6mA and the scanner X-ray indicator lights are on.
5.	Survey one of the areas indicated by the boxes in Appendix A2. Record the highest reading within the area. Repeat the process until all areas are surveyed and readings are recorded.	As the survey is conducted, the radiation meter indicates the degree of radiation emission.
6.	Review all radiation data sheets for high readings.	Readings shall not exceed 350 uR/hr in any box.
7.	After radiation survey is complete, click on "Start Conveyor" button on the GUI. Click the "Turn Off" button to turn off x-rays. Next click "Done". The IQTK bag will eject from exit tunnel. EDAC will reboot.	IQTK bag is ejected and scanner reboots.
7.	Visually inspect the entrance and exit of the system for X-ray caution hazard signs.	X-ray hazard signs reading "Do not insert any part of the body when system is energized" are posted at entrance and exit of system.
9.	Fill out the eXaminer radiation sticker and adhere to to the frame of the eXaminer under door #5 on the left side of the scanner.	Readings shall not exceed 350 uR/hr in any box.

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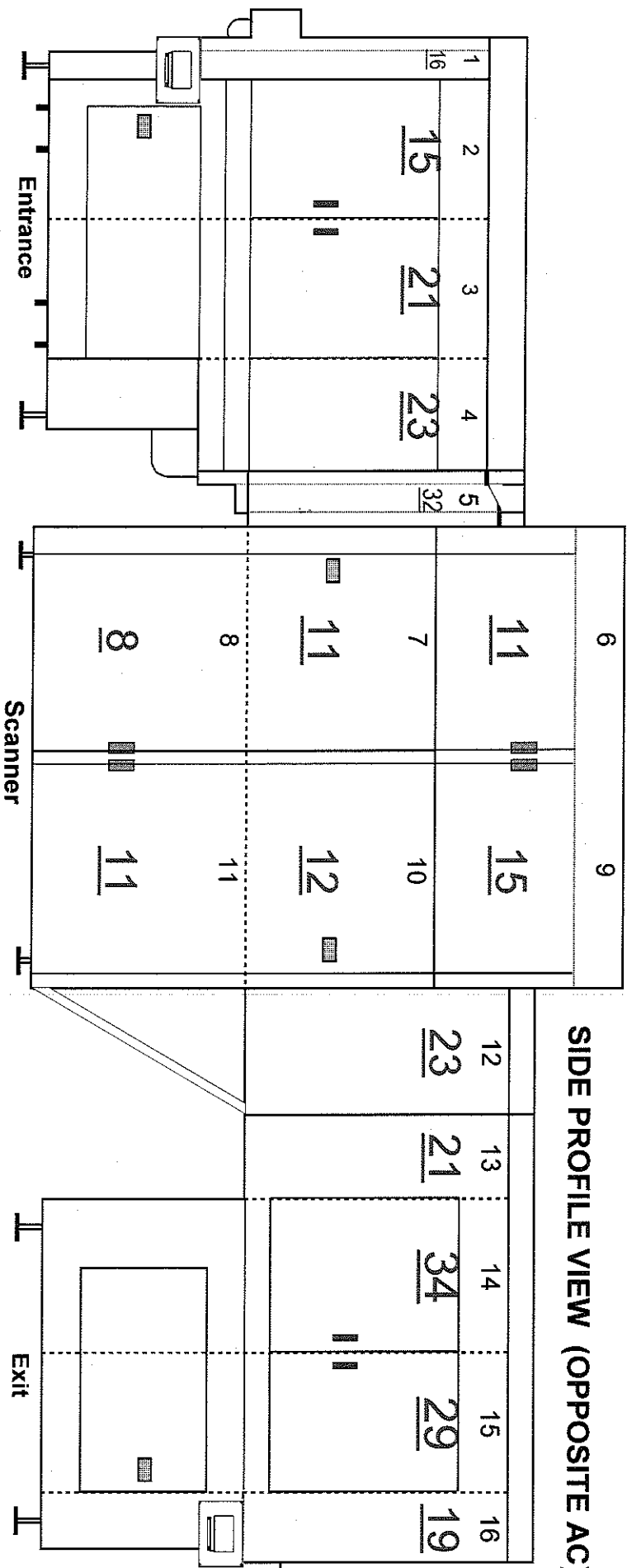


Top View		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Exit Conveyor Top Panel	14
2	Exit Conveyor Top Panel	22
3	Exit Conveyor Top Panel	18
4	Scanner Conveyor Top Panel	12
5	Scanner Conveyor Top Panel	18
6	Scanner Conveyor Top Panel	15
7	Entrance Conveyor Top Panel	11
8	Entrance Conveyor Top Panel	19
9	Entrance Conveyor Top Panel	17

GOOD

Highest Reading	22
Average Reading	16
Lowest Reading	11

# RADIATION SURVEY WORKSHEET



SIDE PROFILE VIEW (OPPOSITE AC)

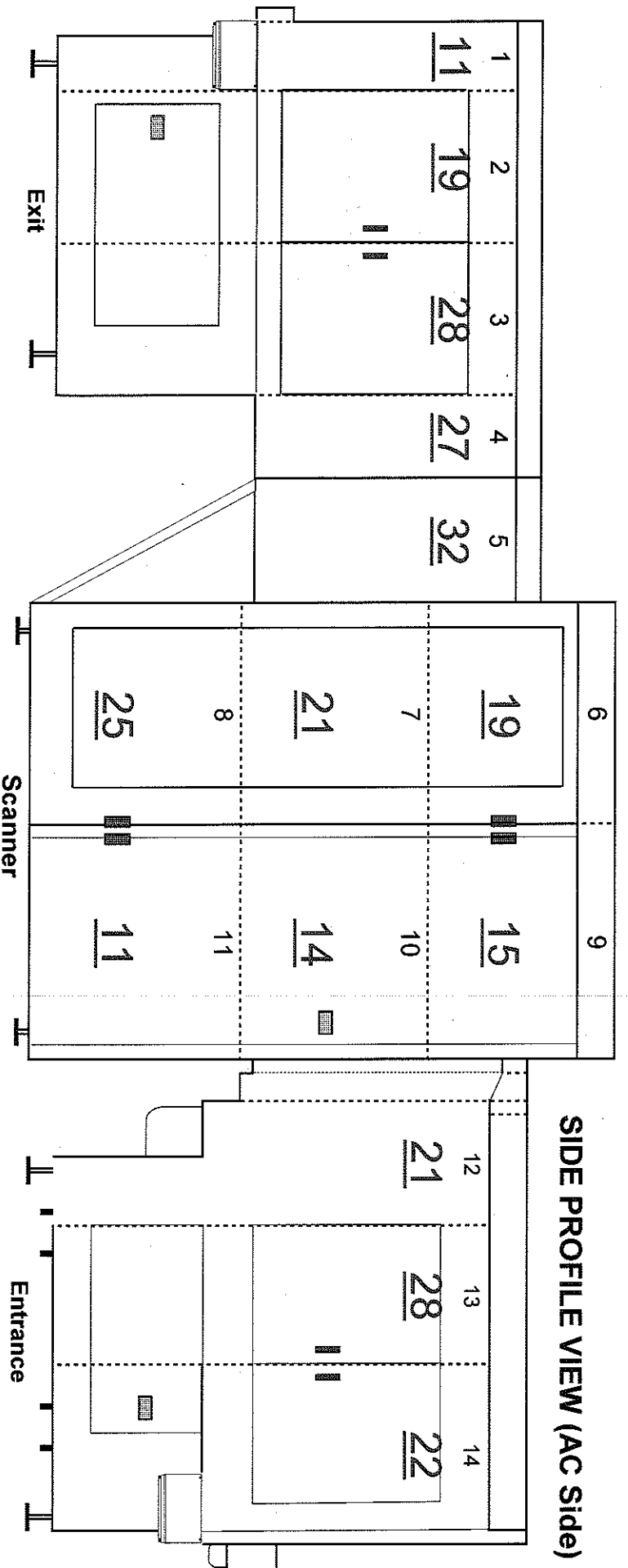
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)

Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		No PROBLEM
1	Entrance Conveyor Panel	16
2	Entrance Conveyor Panel	15
3	Entrance Conveyor Panel	21
4	Entrance Conveyor Panel	23
5	Entrance Conveyor / Scanner Panel	32
6	Upper Scanner Panel	11
7	Middle Scanner Panel	11
8	Lower Scanner Panel	8
9	Upper Scanner Panel	15
10	Middle Scanner Panel	12
11	Lower Scanner Panel	11
12	Exit Conveyor / Scanner Panel	23
13	Exit Conveyor Panel	21
14	Exit Conveyor Panel	34
15	Exit Conveyor Panel	29
16	Exit Conveyor Panel	19

GOOD

Highest Reading	34
Average Reading	19
Low Reading	8

# RADIATION SURVEY WORKSHEET



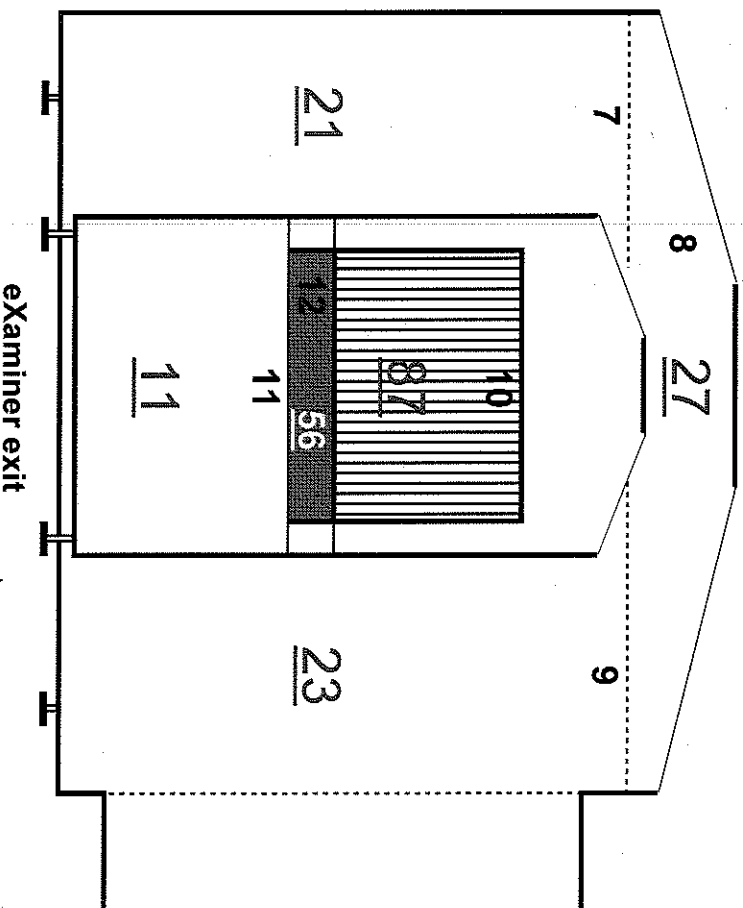
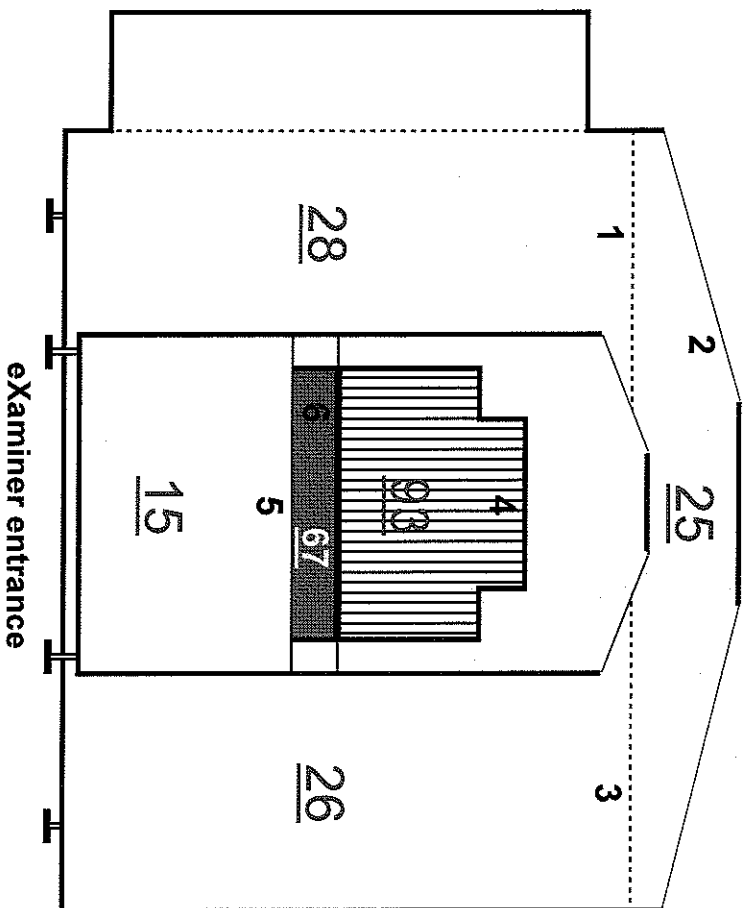
SYSTEM - SIDE PROFILE VIEW ( AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Panel	11	
2	Exit Conveyor Panel	19	
3	Exit Conveyor Panel	28	
4	Exit Conveyor Panel	27	
5	Exit Conveyor / Scanner Panel	32	
6	Upper Scanner Panel	19	
7	Middle Scanner Panel	21	
8	Lower Scanner Panel	25	
9	Upper Scanner Panel	15	
10	Middle Scanner Panel	14	
11	Lower Scanner Panel	11	
12	Entrance Conveyor / Scanner Panel	21	
13	Entrance Conveyor Panel	28	
14	Entrance Conveyor Panel	22	

GOOD

Highest Reading	32
Average Reading	21
Low Reading	11

# RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



GOOD

SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	µR/Hr	No PROBLEM
1 Scanner Panel	28	
2 Scanner Top Panel	25	
3 Scanner Panel	26	
4 Belt Entrance	93	
5 Entrance Lower Panel	15	
6 Belt Lower Facia Cover Entrance	67	
7 Scanner Panel	21	
8 Scanner Top Panel	27	
9 Scanner Panel	23	
10 Belt Exit	87	
11 Exit Lower Panel	11	
12 Belt Lower Facia Cover Exit	56	

Highest Reading	93
Average Reading	40
Low Reading	11